AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q94473

Application No.: 10/576,755

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (currently amended) A perpendicular magnetic recording disk for use in

perpendicular magnetic recording, said perpendicular magnetic recording disk characterized by

comprising a substrate, a soft magnetic layer of a material selected from a group consisting of an

Fe-based material and a Co-based material on said substrate, a ferromagnetic layer on said soft

magnetic layer, having a granular structure, and comprising crystal gains grains mainly made of

cobalt (Co) and grain boundary portions mainly made of SiO₂, and a layer, on said ferromagnetic

layer, having no granular structure and comprising a material selected from a group consisting of

CoCrPt, CoPt, CoPd, FePt, CoPt₃, and CoPd₃, the content of the SiO₂ in said ferromagnetic layer

being 6at% or more, said perpendicular magnetic recording disk comprising, on said substrate,

said soft magnetic layer, said ferromagnetic layer having the granular structure, and said layer

having no granular structure in this order.

2. - 4. (canceled).

5. (currently amended) A perpendicular magnetic recording disk according to claim 1,

characterized in that a spacer layer selected from a group consisting of a Pd layer and a Pt layer

is provided between said ferromagnetic layer and said layer having no granular structure and

comprising the material selected from the group consisting of CoCrPt, CoPt, CoPd, FePt, CoPt₃,

and CoPd₃.

6. (currently amended) A method of manufacturing a perpendicular magnetic recording

disk for use in perpendicular magnetic recording and having at least a soft magnetic layer of a

material selected from a group consisting of an Fe-based material and a Co-based material on a

substrate and a magnetic recording layer on said soft magnetic layer, said method characterized

by,

in a step of forming said magnetic recording layer comprising, on said soft magnetic

layer, a ferromagnetic layer of a granular structure comprising SiO₂, SiO₂ between crystal grains

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comprising cobalt (Co), the content of the SiO₂ in said ferromagnetic layer being 6at% or more, and a stacked layer, on said ferromagnetic layer, having no granular structure and comprising a material selected from a group consisting of CoCrPt, CoPt, CoPd, FePt, CoPt₃, and CoPd₃, forming said ferromagnetic layer on said soft magnetic layer by sputtering in an argon gas atmosphere and then forming said stacked layer having no granular structure and comprising the material selected from the group consisting of CoCrPt, CoPt, CoPd, FePt, CoPt₃, and CoPd₃ by sputtering in an argon gas atmosphere at a gas pressure lower than a gas pressure used when forming said ferromagnetic layer,

said method thereby manufacturing said perpendicular magnetic recording disk comprising, on said substrate, said soft magnetic layer, said ferromagnetic layer having the granular structure, and said layer having no granular structure in this order.

7. - 10. (canceled).